WHAT IS CLAIMED IS:

1. A method of identifying one or more fungicides comprising assaying a chemical compound in a farnesyl-pyrophosphate synthase inhibition assay.

2. The method according to Claim 1, wherein

(a) a host cell which expresses a sufficient amount of a farnesyl-pyrophosphate synthase or a polypeptide with the enzymatic activity of a farnesyl-pyrophosphate synthase is brought into contact with said chemical compound or a mixture of chemical compounds under conditions which permit the interaction of the chemical compound with the polypeptide,

(b) the farnesyl-pyrophosphate synthase activity in the absence of the chemical compound or mixture of chemical compounds is compared with the farnesyl-pyrophosphate synthase activity in the presence of said chemical compound or said mixture of chemical compounds, and

(c) the chemical compound or mixture of chemical compounds which specifically inhibits farnesyl-pyrophosphate synthase is identified.

3. The method according to Claim 1 or 2 wherein a fungal farnesyl-pyrophosphate synthase is used.

4. The method according to any one of Claims 1 to 2 wherein the inhibition of the enzyme activity of the farnesyl-pyrophosphate synthase is measured on the basis of the amount of phosphate group, determined with a phosphate detection reagent.

5. The method according to any one of Claims 1 to 2, further comprising the step of assaying the fungicidal action of the chemical compound identified, by bringing said chemical compound into contact with a fungus.

6. A fungicide, said fungicide comprising an inhibitor of a polypeptide with the activity of a farnesyl-pyrophosphate synthase.

7. The fungicide of Claim 6, wherein said inhibitor is identified by a method according to any one of Claims 1 to 2.

8. A fungicidal composition comprising one or more fungicidal compounds identified by a method according to any one of Claims 1 to 2, and an extender and/or a surfactant.

9. A method of identifying fungicides comprising:

(a) providing a host cell which expresses a farnesyl-pyrophosphate synthase or providing an isolated polypeptide with the enzymatic activity of a farnesyl-pyrophosphate synthase;

(b) providing a chemical compound or a mixture of chemical compounds;

(c) admixing the host cell or the isolated polypeptide and the compound or mixture of compounds under conditions which permit the interaction of the chemical compound or mixture of chemical compounds with the host cell or the isolated polypeptide;

(d) providing a control host cell which expresses the farnesyl-pyrophosphate synthase or providing a control isolated polypeptide with the

enzymatic activity of a farnesyl-pyrophosphate synthase and which control host cell or control isolated polypeptide is not admixed with the chemical compound or the mixture of chemical compounds;

(e) comparing the result of step (c) with the result of step (d); and

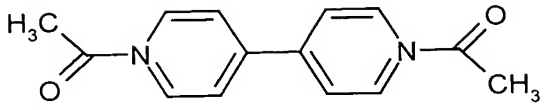
(f) identifying the chemical compound or mixture of chemical compounds which affects the expression of the farnesyl-pyrophosphate synthase from the host cell or the isolated polypeptide compared to the control host cell or the control isolated polypeptide.

10. The method of Claim 9 wherein a fungal farnesyl-pyrophosphate synthase or peptide is used.

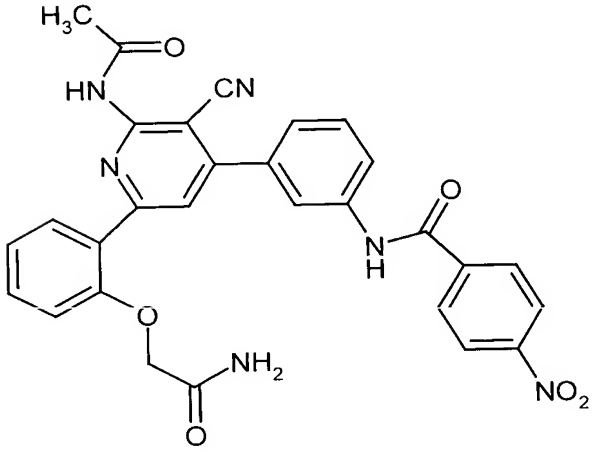
11. The method according to any one of Claims 9 or 10, wherein the chemical compound or mixture of chemical compounds that affects the admixed host cell or isolated polypeptide is assigned a quantitative value compared with the control host cell or the control isolated polypeptide by comparative titration of released phosphate ion in the admixed host cell with the control host cell or the isolated polypeptide compared with the control isolated polypeptide.

12. The method of Claim 9 further comprising admixing the identified chemical compound or the mixture of chemical compounds with a fungus.

13. A fungicidal farnesyl-pyrophosphate synthase inhibitor which is a compound of the Formulae A-E or a salt thereof, wherein the compounds of the Formulae A-E are respectively



Formula A



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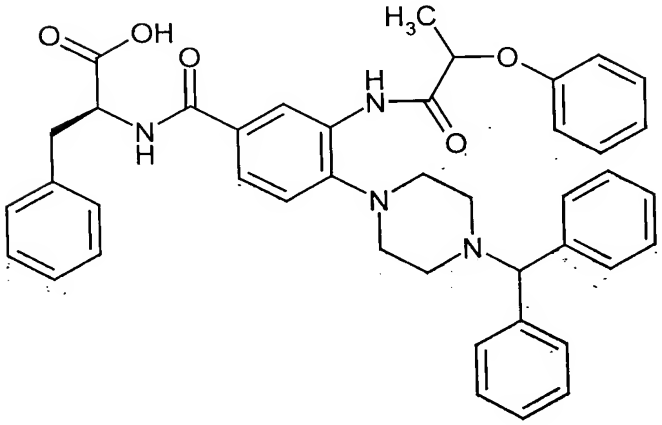

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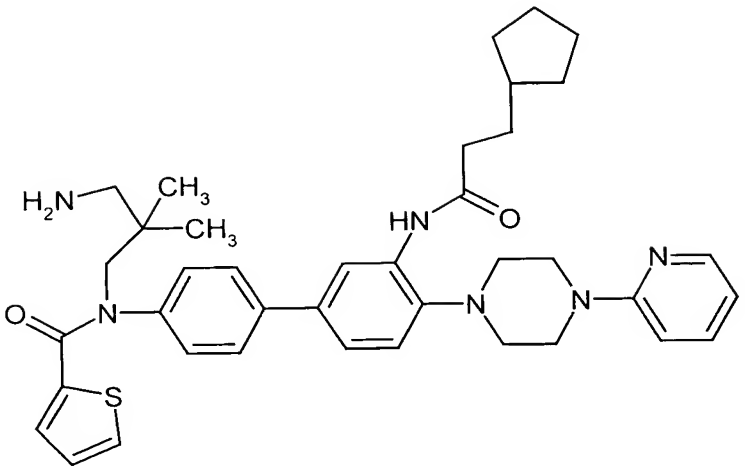

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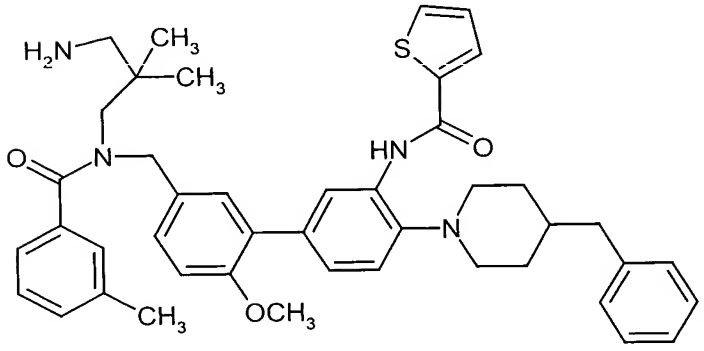

Formula E.